origin he barely suspected) "the most distinguished Portuguese nautical astronomer[3]'.

§v

The Jews—particularly those of Spain and Portugal—thus provided no small part of the technical equipment of those voyages of exploration which suddenly widened the horizons of Europe at the close of the Middle Ages. But their work as actual explorers was by no means insignificant. It was the Radanite Jewish merchants of the ninth century who, according to Ibn Khurdadbih, Postmaster-General of the Caliphate of Bagdad, opened up the trade-routes between Europe and the Ear East, either *via* Egypt and the Dead Sea, or along the courses of the Tigris and Euphrates, or else overland—by the southern route through Northern Africa, or by the northern across Central Europe (see below, pp. 217-8). When Germany was an outpost of barbarism, and all the culture of Europe was concentrated in Moslem Spain, an enterprising Jew, Abraham ibn Jacob, was among the mission which the Caliph of Cordova sent to the northern country, bringing back with him one of the most informative accounts now extant.

But the greatest of mediaeval Jewish travellers was Benjamin of Tudela, who in 1160 left his native city in Navarre, traversing in the course of the next thirteen years the whole of southern Europe, northern Africa, Byzantium, and much of Asia. His *Itinerary*, a classic of Jewish literature, is replete with information concern-

ing not only the various Jewish communities which he encountered, but also the whole of the social and economic structure of those places through which he passed. Eor this reason he is still universally consulted and quoted by every writer on twelfth-century history—all the more